Telehealth Music Therapy in End-of-Life Care in Response to the COVID-19 Pandemic: Two Descriptive Case Reports

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In plain language:

This paper highlights online music therapy in end-of-life care through describing virtual music therapy sessions with two patients in a hospice. Due to the COVID-19 pandemic, social distancing measures caused a rise in demand of video conferencing applications. Music therapists also had to adapt to using telehealth music therapy. There is a lack of research of telehealth music therapy in end-of-life care. There are three main aims of this paper. First, it describes how telehealth music therapy is used in end-of-life care. Secondly, it includes reflections about the usefulness and challenges of telehealth music therapy in end-of-life care. The reflections are based on real experiences of conducting online music therapy with two patients. Lastly, it aims to make practice-informed suggestions for effectively using telehealth music therapy in end-of-life care. Overall, this paper recommends for telehealth music therapy to be also explored as an alternative additional option in end-of-life care.

Practice Article

Telehealth Music Therapy in End-of-Life Care in Response to the COVID-19 Pandemic: Two Descriptive Case Reports

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Abstract

One major change from the COVID-19 pandemic has been the rise of telehealth services. While telehealth itself is not new, social distancing measures caused a rise in its demand through video conferencing applications. Music therapists have also had to adapt to telehealth music therapy. Existing literature demonstrates the potential of telehealth music therapy. There is however a paucity in research of telehealth music therapy for certain populations, such as in end-of-life care. There are some specific needs of patients in end-of-life care that music therapists using online platforms have to navigate. This paper highlights two descriptive case reports of telehealth music therapy in an inpatient hospice setting in Singapore. The aims are to: (a) describe telehealth music therapy in end-of-life care, (b) describe practice-informed reflections about the usefulness and challenges of telehealth music therapy in end-of-life care, and (c) make practice-informed suggestions for effectively using telehealth music therapy in end-of-life care. Overall, this paper shows that telehealth music therapy can be effectively conducted in end-of-life care. It also highlights how various interventions were conducted online, and the considerations involved in managing challenges such as audio latency and the absence of physical presence. While telehealth music therapy in this paper was conducted in the hospice inpatient setting, its effectiveness also led to its extension to the hospice's homecare services. As the global interest in telehealth continues to grow, this paper recommends that telehealth music therapy also be explored as an alternative additional option in end-of-life care.

Key words: telehealth, online, music therapy, COVID-19, palliative, end-of-life

The COVID-19 pandemic has transformed the way healthcare workers worldwide provide care. A major change has been the rise of telehealth interventions due to social distancing measures (Ong et al., 2020). Telehealth is the use of telecommunications technologies to enhance health care and delivery of health-related education (Knott & Block, 2020). Music therapists likewise had to shift to online platforms and learn to use telehealth music therapy. Telehealth music therapy largely involves conducting sessions remotely using online video conferencing tools, such as Zoom and Skype (Agres et al., 2021).

While the literature shows the potential for telehealth music therapy, there is a lack of literature regarding telehealth music therapy in end-of-life care (Pascoe & Clements-Cortés, 2021). Telehealth music therapy has been especially relevant in settings with

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vulnerable groups during the COVID-19 pandemic (Ritchey et al., 2020). Patients receiving end-of-life care are more likely older or with multiple pre-morbid conditions which increases the risk of death from COVID-19 (Zhou et al., 2020). The online platform enabled patients to receive music therapy whilst safely social distancing. There has been an increase in research in telehealth music therapy in healthcare including the oncology setting (Folsom et al., 2021). There are however specific needs of patients in end-of-life care to be considered in telehealth music therapy. This includes the cognitive and physical changes that can come with illness progression (Etkind et al., 2020). More research is needed to show how telehealth music therapy can be used in end-of-life care.

This paper describes the use of telehealth music therapy in a hospice inpatient setting in Singapore. Through two descriptive case reports, this paper describes a music therapist's practice-informed views about telehealth music therapy in end-of-life care, as well as provide suggestions for effective delivery. Practice-informed descriptions in case reports, such as in this paper, are useful in showing the practical aspects of conducting telehealth music therapy in its context (Spooner et al., 2019).

The Impact of the COVID-19 Pandemic on Music Therapy in End-Of-Life Care

Palliative care is an approach that aims to improve the quality-of-life for patients with a life-limiting illness. It seeks to empower patients, and to address suffering in the physical, psycho-emotional, and spiritual aspects for patients and their families (WHO Definition of Palliative Care, 2002). Social distancing measures during the COVID-19 pandemic saw a disruption of services in various settings including palliative care (Vidyarthi, 2020). For example, music therapists in the USA reported a decrease in patient reach due to departmental changes, funding, attempts to reduce exposure, or the temporary suspension of services (Folsom et al., 2021). Reducing contact with staff due to the COVID-19 pandemic in palliative care limits a patient's access to services that could have increased their wellbeing in the midst of illness (Chapman et al., 2020).

Emerging Field of Practice

Telehealth music therapy is an emerging field of practice due to the demand caused by the COVID-19 pandemic (Agres et al., 2021). Practical advantages of telehealth music therapy include increased accessibility for those in remote areas (Fuller & McLeod, 2019). It can also provide opportunities for personalized care. For example, music therapists can pick individualised songs for clients as they can observe important items in the person's environment on screen during online therapy (Pascoe & Clements-Cortés, 2021). Literature also shows the effectiveness of telehealth music therapy in areas of mood regulation and expression of feelings. For example, a significant reduction in anxiety was found for a music-assisted relaxation intervention conducted via phone (Knott & Block, 2020). The therapist used scripted relaxation with instrumental acoustic guitar music in the background. Guided imagery was also used.

A case study on telehealth music therapy conducted by Lightstone et al. (2015) involved a military veteran with depression and post-traumatic stress disorder. He stopped music therapy sessions due to geographical distance but resumed it using video conferencing platforms. Interventions used were primarily improvised music with verbal interactions. The patient expressed a wide range of emotions during the online sessions such as anger and sadness seen through aggressive drum-based improvisation. He also developed a greater ability to recognise and anticipate his dissociative states triggered trough anger. The researchers concluded that therapy could

also be effectively conducted on the online platform.

Considerations in Telehealth Music Therapy

While latency in both visual and audio feedback is a common challenge in telehealth, there are more audio related considerations in telehealth music therapy (Carvajal, 2020). Latency in sound poses a major barrier to real-time singing. Technological advances may however overcome these challenges in the future (Baglione et al., 2021). For example, Tamplin et al. (2019) described a software program called Jacktrip, developed at Stanford University, that provides for low-latency but high-quality audio streaming over internet.

Other considerations include the impact of the music therapist not being physically present. Bates (2014) investigated if assessment and emotional support could be adequately provided without the music therapist's physical presence. Bates (2014) expressed concerns pertaining to the limited screen size hampering assessment, and also the reduced ability of music therapists to respond if there is a threat of harm to self or others in an online session. Provision of physical support must therefore be discussed ahead of time, as well as in the event that safety is compromised. More research is needed as the considerations of telehealth music therapy vary in different organisations and populations (Sucala et al., 2012).

Telehealth Music Therapy in End-Of-Life Care

There are contextual considerations when using telehealth music therapy in end-of-life care. Inherent in end-of-life care is adapting to illness progression which can include physical decline, decreased activity tolerance, altered mental state with delirium or agitation (Wong et al., 2021). Interventions and goals of care are adapted for different phases of the illness. For example, Folsom et al. (2021) highlighted that the use of technology in telehealth can risk contraindication by causing further disorientation to patients with delirium. While there is increasing evidence of the effectiveness of telehealth music therapy, there is a need for more literature on its use in client groups that are less explored, such as people in end-of-life care (Kantorová et al., 2021).

Aims of the Paper

This paper aims to: (a) describe telehealth music therapy in end-of-life care, (b) document practice-informed reflections about the usefulness and challenges of telehealth music therapy in end-of-life care, and (c) make practice-informed suggestions for effectively conducting telehealth music therapy in end-of-life care.

Background

Singapore is a small, multicultural country in Southeast Asia. As there were a substantial number of COVID-19 cases in Singapore in 2020 due to its spread in work dormitories, strict social distancing measures were introduced. This resulted in the increased use of telehealth in Singapore. Before the rise of video conferencing platforms during the COVID-19 pandemic, telehealth was usually a complementary service to face-to-face interactions in palliative care, and typically conducted via phone calls (Vidyarthi, 2020).

Dover Park Hospice is a charitable organisation in Singapore which provides inpatient, day care and home palliative services. In line with national COVID-19 measures in 2020, the inpatient clinical team was split into two work groups. Each work group consisted of a multidisciplinary team comprising: doctors, nurses, medical social workers, physiotherapists, occupational therapists, pastoral counsellor, and expressive arts therapists including music and art therapists. Each work group only

attended to patients within their allocated section of the hospice and intermingling between teams was discouraged. The registered music therapist (RMT) was the only RMT in the hospice and could therefore only see patients within their allocated work section. To adapt to this change, telehealth music therapy was offered to patients whom the RMT could not physically see.

Structure of Telehealth Music Therapy Sessions

An additional in-person facilitator assists with telehealth music therapy at Dover Park Hospice. This role refers to the hospice staff who are physically present with the patient during telehealth music therapy, assist during the session, and also help in technical set up. In-person facilitators are part of the Psychosocial and Social Work (PSS) department in Dover Park Hospice, and participate in this role as a fulfillment of the departmental team goal to support psychosocial needs. This team approach increases the fluidity in how time is spent. The PSS team consistes of social workers, pastoral counsellor, art and music therapists.

Each session was approximately an hour using the video conferencing application Zoom. The RMT used a laptop, while an iPad from the music therapy inventory was used at the patient's side. The iPad was placed in an adjustable, 360-degree rotatable tablet floor stand, which enabled the RMT to see the patient from various angles. Headphones were sometimes used if patients required greater audio clarity and volume. Instruments and song sheets for the patients were given to the in-person facilitator prior to the session. The in-person facilitator also helped to set-up and sanitize all equipment after each session.

Pre-session briefing with the in-person facilitator included patient updates and logistics for the session. If necessary, the RMT would also conduct training for the facilitators who were not musically trained. This training included education about less common instruments like the reverie harp, and also practical tips to better assist patients during instrument engagement such as strumming the guitar. The session ended with a debrief about observations and suggestions for improvements.

Method

This paper presents two descriptive case reports of telehealth music therapy conducted by this author, a RMT at Dover Park Hospice in Singapore. As this is a case report rather than a research study, Institutional Review Board approval was not required. Pseudonyms were used to ensure patient and caregiver confidentiality. Written informed consent was collected from the patients and their families. Case report 1 describes a patient who had face-to-face music therapy before transitioning to the online platform. Case report 2 presents a patient who received music therapy completely online. For learning purposes, the two case reports also show how different interventions were used, with the first more focused on lyric substitution and legacy projects, and the second on instrument engagement and mindful relaxation.

Case Report 1: Music Therapy Conducted Partially Online

Peter was a 69-year-old Chinese gentleman with advanced lung cancer and progressive compressive optic neuropathy, resulting in complete blindness. He was separated from his wife and had 2 adult sons. Peter received 15 sessions of music therapy during his three month stay at the hospice. The first 6 sessions were face-to-face sessions before the shift to the online platform, due to split work team arrangements.

Face-to-Face Music Therapy Sessions

Therapeutic rapport was quickly built due to Peter's easy-going personality. While he accepted his prognosis, he struggled with the

loss of his sight. Peter became visibly emotional when the RMT sang his request, "Nobody's Child," a song by Karen Young about a blind orphan child. Peter spoke of his struggle to accept his recent loss of vision, and his grief of losing his independence. Peter also mentioned he struggled to share his prognosis with his elderly mother, as he was concerned it would impact her health.

Transition to Online Sessions

To help Peter transition to his first online therapy in session 7, the RMT started with songs from previous sessions. Peter adjusted very quickly, singing and talking with the RMT. Due to his visual impairment, he did not need to visually adjust to the screen. He only required orientation to know that the RMT was online and the in-person facilitator was physically with him.

Legacy Work and Song Dedication

Legacy work and song dedications became an anchoring project during online sessions. Peter's youngest son's intellectual disability made it difficult for his family to bring him to visit the hospice. Because his son liked "Twinkle twinkle little star," Peter chose to record him singing it as a song gift. It was recorded in a video, so that his son can see and remember him. Peter also wanted to sing as a gift for Mother's Day. The in-person facilitator video recorded him singing "Shishang zhi you ma ma hao," a popular Mandarin song which loosely translates to "Mother is the best in the world." The RMT accompanied with guitar strumming and singing. Peter subsequently shared that his mother said she was moved to tears while watching the video. While they did not directly discuss his prognosis on the phone, he shared that they conversed about his deteriorating health as she saw Peter in the video on the hospice bed.

Being an Advocate

The video of the Mother's Day song enabled Peter to play an expanded role as an advocate for hospice care. The video was also shown on the hospice's social media Facebook page. Peter wanted to encourage patients to be optimistic, and also for the public to know that patients can still contribute despite suffering from a terminal illness.

Lyric Substitution

While grieving the loss of his sight, Peter channelled his energy towards lyric substitution and derived much joy from being involved in the creative process. In session 11, Peter changed the lyrics of an old Mandarin song to leave a message for his family. The lyrics loosely translate as follows:

I have a big family, and a good mother
She smiles all day long
She most understands her children's heart
There is also the younger brother
He has disability but he is happy
He sings all day along,
Twinkle twinkle all day long.

The lyrics involved Peter writing from his oldest son's perspective. Peter shared that the song conveyed his hope for his son to take care of his mother, and younger brother with a disability. He also shared that the song was a tribute to his former wife, acknowledging that she was a good mother.

Peter also substituted the lyrics of a Mandarin song to describe his appreciation for the staff. He sang the song for the RMT and in-person facilitator, and laughed happily after hearing their grateful reaction. The lyrics loosely translated as follows:

Although I cannot see you
But I can hear you
You are beautiful angels
Making my heart feel warm.

The process of song writing allowed Peter to express himself, and refocus on his ability instead of loss of sight. He started to share

his songs with various staff, saying that it made him happy to share his music. Peter passed away peacefully two weeks after his last music therapy session. All legacy works were handed to Peter's social worker to give to his family.

Case Report 2: Music Therapy Conducted Completely Online

Ivan was a 73-year-old Catholic Chinese gentleman diagnosed with terminal liver cancer. He was married to his second wife. He had 3 children from his first marriage and they were all based overseas. His second son Jonathan had temporarily returned to Singapore. Ivan used to be a military officer before working as a taxi driver after retirement. He received 6 weekly sessions of telehealth music therapy during his two months stay at the hospice.

Online Initial Assessment

Ivan's family brought his guitar for the initial session and he immediately attempted to tune it. He seemed to have difficulty tuning the guitar, only plucking the string but not adjusting the guitar peg. Ivan then spoke of loving to bring joy to others and singing for passengers in the taxi. He seemed comfortable interacting with the RMT online, but also tended to direct his sharing to others physically around him. Ivan subsequently sang with his wife who was present, while the RMT played the guitar alongside.

Modified Instrument Engagement

Prior to session 3, the RMT modified Ivan's guitar to open C tuning to enable him to experience playing the guitar despite declining finger dexterity. The RMT demonstrated simple guitar techniques including hitting on the strings like a drum. With the help of the in-person facilitator, Ivan drummed on the guitar while singing the song "Love Me Tender" dedicated to his siblings and children. The video recordings were sent Ivan's social worker who shared it with his family as a legacy work.

Johnathan subsequently shared that telehealth music therapy had inspired Ivan's siblings to send him music videos to encourage him. They were unable to visit as they were overseas, so sharing music became a way for them to care for Ivan. In one of the sessions, Jonathan played the pre-recorded song "Be-bop-a-lula" that Ivan's siblings sent. Ivan closed his eyes and was absorbed in the music. He sang enthusiastically and danced, moving his body and hands.

Spirituality and Music for Relaxation

In session 4, Ivan shared about how God had changed his life. He then spoke of his appreciation for his first wife for giving him his children, and wanted to bless her with "The Lord's Prayer." During his chosen song of "Amazing Grace," Ivan closed his eyes and appeared absorbed in the song. Even after the music stopped, he remained still with closed eyes and a faint smile, as though deep in thought. After an extended period of silence, the RMT ended the session with mindfulness exercises to orientate him, asking him to feel his breath, body and hands. Ivan responded by fidgeting with the egg shaker in his hands and gradually opened his eyes.

Telehealth Music Therapy with Illness Progression

In the last few weeks before he passed away, Ivan experienced episodes of lethargy and confusion. In his music therapy, he smiled when the RMT started singing "Amazing Grace." Ivan then raised his voice mid-way, asked for another song but again requested for it stop half-way. When asked if he wanted to rest, he said to wait, as there was still time. The RMT assessed that Ivan was slightly confused but still wanted to connect. The RMT then facilitated relaxation with music, slowly alternating between E minor and A minor 7th on guitar accompanied with low pitch humming. The

RMT then verbally facilitated a short, guided muscle relaxation intervention. Ivan closed his eyes and was observed visibly relaxed during the intervention.

Discussion

Strengths of Telehealth Music Therapy in End-Of-Life Care

This paper aims to show practice-informed experiences of telehealth music therapy in the context of end-of-life care. The two case reports demonstrate similar strengths and challenges of telehealth music therapy, whilst highlighting the use of different interventions.

Therapeutic Relationship. Based on the level of engagement seen in the case reports, therapeutic rapport can be effectively built on the online platform, even without any initial face-to-face meeting. In case report 1, Peter engaged well during his first face-to-face music therapy session and remained equally engaged on the online platform. Sessions with Ivan in case report 2 were held completely online. He was engaged in the first session but had directed a few of his conversations towards those around him, instead of the RMT. Ivan's intention to interact with the RMT on screen was stronger from the second session onwards. Thereby, it seems that therapeutic rapport can be built completely online, though initial face-to-face interactions can speed up the process. Also, face masks can be taken off for online sessions. This can assist with connection as patients can see the RMT's face.

Impact of Interventions. Online singing was effective in both case reports. Both Peter and Ivan spoke of their enjoyment of choosing songs and singing online. The RMT managed audio latency during online singing such that it was mostly experienced only by the RMT, but not the patients. This meant singing at a consistent speed, and not slowing down to match the patient's voice, which would result in a delay at the patient's end. This required focus as it involved singing while ignoring the audio latency. The patients on their end hear the consistent tempo of the RMT's voice and sing accordingly without experiencing the audio latency. Music therapists may therefore need to be more conscious about the patient's online experience from their point of view.

Recording during online sessions for legacy work required additional considerations. In case report 1, the in-person facilitator used a videorecorder to record Peter singing with the RMT for his Mother's Day gift. The RMT had managed the experience of audio latency for the patient, and the recording was done in the physical space of the patient. The video therefore had no audio latency. However, if the recording was done within the RMT's physical space, or via Zoom video recording function, there would be audio latency. Other solutions include using pre-recorded recordings for the patient to sing along with to avoid audio latency complications. Overall, there are more considerations for recording during online sessions compared to face-to-face ones.

Interventions which involved verbal interaction such as lyric substitution and lyric discussion could be conducted effectively online. In case report 1, lyric substitution was used for legacy gifts, with lyrics and a song given to family. Music to promote relaxation could also be conducted effectively online, seen in case report 2 where Ivan was observed to visibly relax when the RMT played music with low arousal and facilitated a brief progressive muscle relaxation.

Instrument engagement however may need to be simplified during online sessions. For example, patients could strum or hit the strings on a guitar with open string tuning. If it was a face-to-face session, the RMT might form the chords on the guitar for patients to strum on. However, the in-person facilitators are not musically trained, and cannot fully play the role of a co-therapist to guide the

patient. The extent of modification needed thereby might depend on the skillset of the person assisting the patient.

Challenges of Telehealth Music Therapy in End-of-Life Care

Technological interruptions remain a key challenge. This author at times also called wi-fi disruptions commercial breaks, which eventually inspired a collaborative creation of a jingle with a patient while awaiting the return from such 'commercials.' This author jokingly role-played a television programme host and asked the patient to name the 'music therapy show.' The jingle was created using lyric substitution with a song that the patient likes, incorporating the name that he chose.

Suitability for Telehealth Music Therapy in End-of-Life Care

Not everyone is suitable for telehealth music therapy (Agres et al., 2021). Based on this author's experiences in the hospice, telehealth music therapy is less suitable for patients with ongoing cognitive fluctuations. This includes patients who might have delirium, and also patients with advanced dementia. Music therapists are less equipped to respond if patients display delirium, confusion or agitation online. It is difficult to substitute physical presence in such situations, especially as touch is known to calm agitated behaviour for patients with dementia (Cai & Zhang, 2015). Similarly, while Lee et al. (2021) highlighted the benefits of online group singing for those with dementia, the authors did not specify if individuals with advance dementia were included. The authors also spoke of the need for more research on the use of online platform for those patients with dementia. Music therapists must carefully consider such factors, for the safe use of telehealth music therapy for different diagnosis and at different points of illness trajectory.

As telehealth music therapy in Dover Park Hospice was observed to be beneficial in the inpatient setting during the COVID-19 pandemic restrictions, it was expanded into a referral-based service for the hospice's homecare patients. Telehealth music therapy in Dover Park Hospice became a sustainable service in itself, beyond being a pandemic response. While there are differences in the usefulness and challenges of telehealth music therapy between the inpatient and homecare setting, interventions and the role of the in-person facilitator remained largely similar.

The Role of the In-Person Facilitator

The in-person facilitator was integral in set-up, dealing with technical glitches, and assisting patients with instruments. The RMT sometimes also asked for the facilitator's observations when it was difficult to see the patient's expression or movement clearly. The facilitator also helped to clarify communication such as repeating the RMT's words if the patient did not hear, and also gave real-time feedback on audio or visual quality.

As patients in end-of-life care are more frail, most would need assistance for online sessions, especially with the technological aspects. However, the degree of assistance needed can vary. This author has had online music therapy sessions without any in-person facilitator involved, as the patient could handle all aspects of the sessions independently. In this author's experience, there were times the facilitator's role was eventually faded down to a minimal involvement, mostly in set-up and packing up. The facilitator did not need to be present during the session itself, as the patient was already familiar with the RMT and the flow of the online session.

While it is helpful and convenient to have a hospice staff member be the in-person facilitator, it requires an additional manpower count which may not be always practical. Enlisting trained volunteers or caregivers to fill the in-person facilitator role

could be a future option. A differentiated approach for telehealth music therapy instead of a one size fits all mentality is useful. This may mean varying the levels of involvement of the in-person facilitator for different patients, or at different points of patient' treatment.

Future Improvements

Involving caregivers to help in telehealth music therapy is a possible future development, especially in the hospice homecare setting. For example, Cole et al. (2021) found that caregiver support during sessions was a requisite for neurologic music therapy to be carried out online, especially for sensorimotor techniques and dealing with technological difficulties.

There is also a need for a systematic approach for telehealth music therapy in end-of-life care. The Connected Music Therapy Teleintervention Approach is an example of a clear framework describing remote music therapy for children with hearing loss and their families (Fuller & McLeod, 2019). The approach clearly highlights the focus of delivery models, session plan framework and technology practice features. More research is needed to likewise develop a clear framework for telehealth music therapy in end-of-life care.

Limitations of the Case Studies

As the case reports in this paper are a from a practice-informed view, the experiences cannot be generalised. The reflections are also within the Singapore context and may not be directly applicable to other nationalities and cultures. The visual impairment of Peter in case report 1 could have also impacted his telehealth music therapy experience, making it less comparable to other patients who do not have visual impairment. As Peter's interaction with the RMT was based only on what he heard and not on his visual experience, telehealth music therapy primarily needed to provide good audio input for him to hear the RMT. Other patients without visual impairment would need to adjust to both hearing and seeing the RMT on screen. This therefore possibly adds to the adjustments needed for telehealth music therapy, for both patients and the RMT.

Conclusion

The lack of research about telehealth music therapy in end-of-life care creates a challenge for music therapists who are considering it but are unsure of its viability in their practice. This author hopes that the reflections in this paper can be a starting point to encourage exploration of telehealth in end-of-life care. The practice-informed suggestions also hopefully provide more contextual considerations for the safe and optimal use of interventions during online music therapy in end-of-life care. While this paper describes telehealth music therapy in an inpatient hospice setting, this author has also seen its impact in the hospice homecare setting. Telehealth music therapy has the potential to become a sustainable delivery model beyond a pandemic response. As technology continues to develop, we can also anticipate smoother processes and more innovative ways to enhance patient's experiences online. With ongoing global support to advance telehealth, telehealth music therapy likewise has much potential for future development and use, including in end-of-life care.

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